EXHIBIT F

UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

G. DAVID JANG, M.D.,

Plaintiff,

v.

BOSTON SCIENTIFIC CORPORATION, a Delaware corporation; SCIMED LIFE SYSTEMS, INC., a Minnesota corporation,

Defendants.

Case No. EDCV 05-426-VAP(CTx)

CLAIM CONSTRUCTION ORDER

The Court conducted a hearing on May 30, 2006, on the parties' proposed constructions of certain terms in Claim 1 in the two patents at issue here,[1] pursuant to Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed. Cir. 1995) (en banc) *aff'd*, 517 U.S. 370 (1996). Having considered the written submissions from both parties, as

[1]These are U.S. Patent Nos. 5,922,021, entitled "Intravascular Stent" ("the '021 patent'") and 5,954,743, entitled "Intravascular Stent" ("the '743 patent"), attached to the Declaration of June T. Tai as Exhibits 1 and 2, respectively, and to the Declaration of John Nilsson as Exhibits A and B, respectively, referred to collectively in this Order as "the Jang patents."

99

well as the arguments presented at the hearing, the Court now issues its claim construction order.[2]

I. INTRODUCTION

Plaintiff G. David Jang, M.D., is the inventor of certain coronary stents;[3] in 1999, the United States Patent and Trademark Office issued patents for these intravascular stents, used to treat coronary artery disease. In 2002, Plaintiff assigned his rights in these coronary stent patents to Defendants Boston Scientific Corporation and Scimed Life Systems, Inc. (collectively referred to in this Order as "BSC"). Plaintiff alleges that under various assignment and other agreements between the parties, BSC paid Plaintiff $50 million immediately, and an additional $10 million on June 2, 2004, but failed to pay other amounts owed under the agreements. [Pl.'s First Amended Complaint ("FAC") ¶¶ 18, 19.]

// // //

// // //

---

[2]The parties agree that the disputed terms have the same meaning in both the '021 and '743 patents. See Dr. Jang's Opening Claim Construction Brief ("Pl.'s Br.") at 2; Defendants Boston Scientific Corp.'s and Scimed, Inc.'s Opening Claim Construction Brief ("Def'ts' Br." at 1 fn.3.

[3]"A coronary stent is a flexible, mesh, metal tube that is inserted in the artery in a compressed state." Pl.'s FAC, ¶ 8.

Plaintiff now sues for both equitable and legal relief,[4] alleging that BSC breached the 2002 agreement by failing to pay for products it sold which were "covered by" one or more of the assigned patents. In this context, the parties seek construction of certain terms in Claim 1 in the two Jang patents.

II. LEGAL STANDARD

Claim construction is a legal question for the Court. Markman, 517 U.S. at 390; Cyborg Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1454 (Fed. Cir. 1998) (en banc).

The Court begins its construction of a patent claim with the words of the claim itself, which "are generally given their ordinary and customary meaning . . . , the meaning that the term would have to a person of ordinary skill in the art in question . . . as of the [patent's] effective filing date." Phillips v. AWH Corp., 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (en banc).

The parties in the case dispute the proper extent to which the Court should rely on the embodiments and specifications in construing the claims here. For example, Plaintiff argues that the Defendant is tempting the Court into error by inviting it, when construing the

---

[4]The FAC contains claims for (1)Rescission, (2) Reformation of Contract, (3) Breach of Contract, (4) Breach of Fiduciary Duty, and (5) Declaratory Relief.

disputed terms, to limit its consideration only to the embodiments and specifications contained in the patent. See Pl.'s Br. at 20. The defense, on the other hand, criticizes Plaintiff for offering dictionary definitions, citing Phillips and Nystrom v. Trex Co., 424 F.3d 1136 (Fed. Cir. 2005) for the proposition that "the claims must be read in view of the specification, of which they are a part." [Def'ts' Br. at 16.]

The Court looks to the patent specifications when construing "the meaning of a claim term as it is used by the inventor in the context of the entirety of his invention. . . ." Comark Comm. v. Harris Corp., 156 F.3d 1182, 1187 (Fed. Cir. 1998). Furthermore, in the Phillips case, the Federal Circuit emphasized the specification's critical importance: it "is always highly relevant to the claim construction analysis. Usually it is dispositive; it is the single best guide to the meaning of a disputed term." Phillips, 415 F.3d at 1315 (quoting Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996).

In Phillips, the Federal Circuit also addressed the use of dictionaries in claim construction, reiterating that "[i]n some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim

construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words. . . In such circumstances, general purpose dictionaries may be helpful. Phillips, 415 F.3d at 1314 (citing Brown v. 3M, 265 F.3d 1349, 1352 (Fed. Cir. 2001)). With these principles in mind, the Court turns to the terms at issue.

II. CLAIM CONSTRUCTION

1. "Expansion Column"

The parties agree that the expansion columns consist of expansion pairs; they dispute, however, whether or not the expansion columns can contain structural members, or struts, other than expansion strut pairs, and whether the columns should be defined as "tubular." Thus, Plaintiffs ask the Court to adopt the following construction of this term: "a vertical extension of space around the circumference of the stent formed by two or more expansion strut pairs." [Pl.'s Br. at 18.] The defense seeks an order construing the term as follows: "a tubular structure formed solely by a plurality of expansion strut pairs arranged in a column along the circumference of the stent." [Def'ts' Br. at 24.][5]

---

[5]The Court's resolution of the parties' dispute over the construction of this term also determines its construction of the following terms: **(1) "expansion strut,"** for which Plaintiff seeks the following construction: "A strut that extends at least in part in the direction of the longitudinal axis of the unexpanded

(continued...)

The language of the patent, including the Summary of the Invention as well as the specifications, supports Defendants' proposed construction.

The Summary of the Invention, for example, mentions only expansion strut pairs - and no other structural member - in the description of the expansion columns. [See '021 Patent, Col. 3, lines 47-67, Col. 4, lines 1-8.] As the Federal Circuit explained in C.R. Bard, Inc. v. U.S. Surgical Corp., 388 F.3d 858, 864 (Fed. Cir. 2004), "[a]lthough a statement's location is not 'determinative,' the location can signal the likelihood that the statement will support a limiting definition of a claim term. Statements that describe the invention as a whole, rather than statements that describe only preferred embodiments, are more likely to support a limiting definition of a claim term." (Citations omitted.) And, as Defendants point out, all of the references to "expansion columns" in the patents mention only expansion strut pairs. See '743 patent, col. 5, lines 14-15, 29-38; col. 8, lines 8-21.

// // //

---

[5](...continued)
stent." [Pl.'s Br. at 16] and Defendants argue should be construed as follows: "A strut in an expansion column" [Def'ts' Br. at 35]; and (2) **"expansion strut pair."** For both of these terms, the Court adopts the defense's proposed construction.

Plaintiff also argues that Claim 1 of both patents recites that a plurality of expansion strut pairs form an expansion column, as opposed to reciting that the column is formed *solely* by a plurality of expansion strut pairs. [Pl.'s Br. at 18.] Plaintiff rests this argument, in part, on what he characterizes as the "comprising" nature of the claim; he contends that a comprising claim is "open" and additional elements may be added beyond those that are specifically recited in the claim. [Pl.'s Rebuttal Br. at 6.] Furthermore, he argues, one cannot avoid infringement by adding a feature to a patented invention, citing Lighting World, Inc. v. Birchwood Lighting, Inc., 382 F.3d 1354, 1365 (Fed. Cir. 2004). According to Dr. Jang, his patents do not disclaim inclusion of additional elements in expansion columns, and in fact teach that other elements may be added, such as radiopaque markers. [Plaintiff's Supplemental Claim Construction Brief ("Pl.'s Supp'l Br.") 7.]

"When a patent claim uses the word 'comprising' as its transitional phrase, the use of 'comprising' creates a presumption that the body of the claim is open. In the parlance of patent law, the transition 'comprising' creates a presumption that the recited elements are only a part of the device, that the claim does not exclude additional, unrecited elements." Crystal Semiconductor Corp. v. TriTech Microelect. Int'l, Inc., 246 F.3d 1336

(Fed. Cir. 2001). Plaintiff relies too heavily on this concept, however; the Federal Circuit case law reiterates that mere presence of the transitional word "comprising" in the patent "does not free the claim from its own limitations." Kustom Signals, Inc. v. Applied Concepts, Inc., 264 F.3d 1326, 1332 (Fed. Cir. 2001).

Only "expansion strut pairs"[6] are described in the claim language; as discussed above, nowhere does the patent describe any other structural member contained in the expansion columns. ['743 patent, col. 5, lines 14-15, 29-38; col. 8, lines 18-21.] The Court thus adopts Defendants' proposed construction of this claim term; for the foregoing reasons, it also adopts the defense's proposed definition of "expansion strut," i.e., "a strut in an expansion column."

Plaintiff also objects that the patents neither describe nor define the expansion columns as "tubular structures." [Pl.'s Br. at 18.] In order to perform its intended function, i.e., to prop open the artery wall into which it has been inserted, the patented stent necessarily forms a tubular shape when fully expanded. The patent describes the role played by the expansion columns when the stent is expanded thus: "each expansion

---

[6]The parties agree that "expansion strut pair" includes "joining struts" as well as "expansion struts." Def'ts' Br. at 24 fn. 13.

column 24 becomes circumferentially stretched...." ['021 patent, col. 8, lines 34-38.] Each illustration of the expanded stent in the patent, showing the expansion columns, displays them in the form of a tubular structure.

Accordingly, the Court adopts the proposed construction of this term advanced by the defense.

2. "Connecting Strut Column"

The parties dispute two issues regarding construction of this term: whether the connecting struts must be attached to each other, and whether the columns must be defined as formed solely of connecting struts. Hence, Plaintiff proposes that this term be construed as follows: "A plurality of the first connecting strut forming a first connecting strut column," (Pl.'s Br. at 23), whereas the defense offers the following construction: "A column formed **solely** of a plurality of connecting struts **unattached** to each other and arranged along the circumference of the strut." (Def'ts' Br. at 26; emphasis added.)

As to the first dispute, Plaintiff argues that Defendants base their proposed construction on an impermissible theory that the only embodiments disclosed in the Jang patents show connecting struts that are

unattached to each other. [Pl.'s Br. at 23; Pl.'s Supp'l Br. at 14.] For support, Plaintiff cites to Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 906 (Fed. Cir. 2004); there, the court expressly disavowed any "contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment. . . . Even when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using 'words or expressions of manifest exclusion or restriction.'" (Citations omitted.) Relying on this passage, Plaintiff argues that Defendants have failed to point to any language in the patents where Dr. Jang summarizes his invention with limiting language, requiring that the connecting struts be unattached to one another. [Pl.'s Supp'l Br. at 14-15.)]

Defendants' proposed definition does not run afoul of the proscription against unduly restrictive claim construction. First, as they point out, "every single figure in the Jang patents that shows 'connecting columns' . . . shows that the connecting struts forming those columns are not connected to each other, but rather (like prior art designs) connect the 'expansion columns' . . . on either side of them." [Def'ts' Br. at 26.] In

other words, all of the figures in the specifications depicting the connecting columns portray those columns with connecting struts unattached to each other. All of the embodiments disclosed in these patents contain connecting columns with connecting struts which are unattached to each other; Plaintiff has not cited to a single instance in the specifications to support his contrary position. The specifications' descriptions of the connecting columns clearly state that the connecting struts are unattached to one another. Second, the Federal Circuit in the Phillips case had this to say regarding a lack of explicit language in the patent defining a claim term or disavowing a particular construction: "[R]equiring that any definition of claim language in the specification be express, is inconsistent with our rulings that the specification is 'the single best guide to the meaning of a disputed term.'" Phillips, 415 F.3d at 1321.

The parties' second dispute revolves around whether or not connecting strut columns are composed *solely* of connecting strut pairs. Plaintiff correctly notes the similarity between this issue and that resolved above, i.e., whether the term "expansion column" should be construed as composed only of expansion strut pairs. Again, however, the specifications, illustrations, and Summary of the Invention all uniformly and consistently

show and define the connecting strut columns as composed only of connecting strut pairs. Thus, the authorities cited above support Defendants' proposed construction.

Finally, Defendants argue strenuously that to accept Plaintiff's proposed construction would "collapse the structural distinction between connecting struts and expansion struts, and between expansion columns and connecting columns," and thus "broaden[] the claims to cover prior art stents, even ones with very different architectures." [Def'ts' Br. at 32.] This, Defendants point out, would run the risk that the patent claims in the Jang patents now assigned to them would be rendered invalid as disclosed by or obvious under the prior art, an inequitable result according to the Supreme Court in Westinghouse v. Formica, 266 U.S. 342 (1924).

3. "Connecting Strut"

Plaintiff offers this construction of the term "connecting strut": "a strut that couples an expansion strut pair in one expansion column with an expansion strut pair in another expansion column." Defendants ask the Court to construe this term as follows: "A strut that connects adjacent expansion columns."

// // //

All of the embodiments disclosed in the Jang patents depict "connecting struts" connecting adjacent columns; the language in the specifications and the Summary of the Invention likewise consistently state that the "connecting struts" connect adjacent expansion columns. Plaintiff argues that all these reflect only "preferred embodiments," upon which Defendants are relying in an approach specifically disapproved by Phillips.

The Federal Circuit last year reiterated that the "words of the claim are generally given their ordinary and customary meaning," i.e., the meaning the term would have to a person of ordinary skill in the art in question at the time of the invention, "who views the claim term in the light of the entire intrinsic record. . . Thus, the claims 'must be read in view of the specification, of which they are a part.'" Nystrom, 424 F.3d at 1142 (citing Phillips, 415 F.3d at 1316, and Markman, 52 F.3d at 979). The entire intrinsic record here supports Defendants' proposed construction: that "connecting strut" means a strut that connects adjacent expansion columns. Accordingly, the Court adopts that definition of this term.

4. Other Terms

The parties dispute a few other terms, some of which the Court finds need not be construed.

a. "proximal" and "distal"

The construction proposed by Plaintiff is that consistent with the language in the patents, and accordingly the Court adopts Plaintiff's construction of these two terms, i.e.,

b. "radius of curvature"

In support of its proposed construction of this term, Plaintiff cites the Court to a dictionary definition, i.e., Webster's Third New International Dictionary: "the reciprocal of the curvature of a curve," and proposes that the term be construed as "a mathematical measurement of the curvature of a curve; specifically, the reciprocal of the curvature of a curve." Defendants propose that the term be construed to mean "a smooth curve."

Plaintiff's proposed definition is more precise and is consistent with the language and specifications in the patent, and the Court hereby adopts it.

c. Terms for which no construction is needed

The remaining terms need no construction by the Court: "comprising,"[7] "column," "longitudinal axis," and "...the first expansion strut of the first expansion strut pair...has a longitudinal axis offset from a

---

[7]As noted above, however, the relevant case law defines this term in "patent law parlance."

longitudinal axis of the first expansion strut of the second expansion strut pair...."

Dated: August 23, 2006

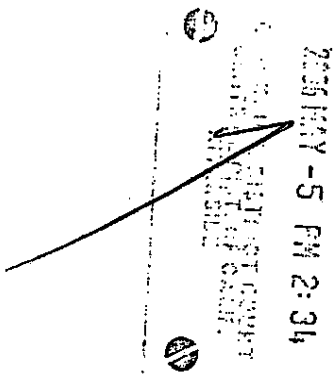
VIRGINIA A. PHILLIPS
United States District Judge

EXHIBIT G

GIBSON, DUNN & CRUTCHER LLP
Wayne M. Barsky, SBN 116731
Michael A. Sitzman, SBN 156667
Julian W. Poon, SBN 219843
June T. Tai, SBN 226997
Brenda L. Kleidosty, SBN 234987
Shannon E. Mader, SBN 235271
333 South Grand Avenue
Los Angeles, California 90071-3197
Telephone: (213) 229-7000
Facsimile: (213) 229-7520
wbarsky@gibsondunn.com
jpoon@gibsondunn.com

MUNDELL, ODLUM & HAWS, LLP
Thomas C. Mundell, SBN 99081
650 E. Hospitality Lane, Suite 470
San Bernardino, CA 92408
Telephone: (909) 890-9500
Facsimile: (909) 890-9580
tmundell@mohlaw.net

Attorneys for Plaintiff,
G. David Jang, M.D.



FILED

UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

EASTERN DIVISION - RIVERSIDE

G. DAVID JANG, M.D.,

Plaintiff,

v.

BOSTON SCIENTIFIC CORPORATION, a Delaware Corporation; SCIMED LIFE SYSTEMS, INC., a Minnesota Corporation,

Defendants.

Case No. EDCV 05-00426 VAP (SGLx)

DR. JANG'S OPENING CLAIM CONSTRUCTION BRIEF

Date: May 30, 2006
Time: 9:00 a.m.
Ctrm: 2
Judge: The Honorable Virginia A. Phillips

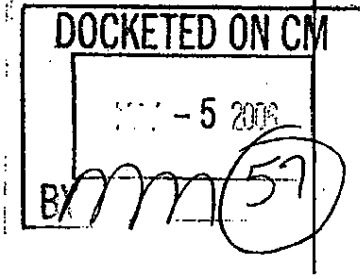


TABLE OF CONTENTS

Table of Contents
(Continued)

TABLE OF AUTHORITIES

Page(s)

Cases

Table of Authorities (Continued)

Other Authorities

I.

PRELIMINARY STATEMENT

In this action, plaintiff G. David Jang, M.D. ("Dr. Jang"), an Interventional Cardiologist and Professor of Medicine at Loma Linda University Medical Center, is seeking equitable relief and compensatory damages against defendants Boston Scientific Corporation and its wholly-owned subsidiary, Scimed Life Systems, Inc. (collectively, "BSC").

This dispute arises principally out of a 2002 agreement pursuant to which Dr. Jang assigned certain coronary stent patents to BSC in exchange for BSC's agreement to pay up to $160 million in compensation to Dr. Jang. Of that amount, $50 million was paid by BSC at the time the agreements were signed in 2002, and the balance—$110 million—was contingent upon, *inter alia*, BSC selling products "covered by" one or more claims of the patents transferred by Dr. Jang.

Dr. Jang contends that BSC has sold billions of dollars of stents relying upon his technology and covered by the patents assigned to BSC, but has failed and refused to pay Dr. Jang in accordance with the parties' agreement. Thus, this claim construction hearing arises *not* in a patent infringement context, but rather in the context of a contractual dispute where the Court will be required to determine the scope of the claims of the patents assigned by Dr. Jang to BSC.[1]

Only two of Dr. Jang's patents are at issue in this proceeding, U.S. Patent No. 5,922,021, *Intravascular Stent* (issued July 13, 1999) (the "'021 patent"), and U.S. Patent No. 5,954,743, *Intravascular Stent* (issued September 21, 1999) (the "'743 patent").

---

[1] Among the remedies Dr. Jang is pursuing in this action is rescission of the assignment of his stent patents, based upon a material failure of the promised consideration. In this regard, Dr. Jang has offered to restore to BSC the $50 million he received from BSC in 2002, provided of course Dr. Jang receives back from BSC ownership of his patents.

As will be readily apparent, the '021 and '743 patents share near-identical specifications, and have a very high level of overlap in claim terminology. The parties have agreed that claim terms shared by the '021 and '743 patent should be given the same meaning. Moreover, although multiple claims of each patent are being asserted by Dr. Jang to cover BSC's stents, all of the claim terms at issue in this proceeding—with only one exception—can be found in claim 1 of the '021 patent. Thus, much of the following discussion will focus on the claim terms appearing in claim 1 of the '021 patent; the understanding being, of course, that where such terms appear in the '743 patent as well, they should be given the same meaning.

There are a limited number of claim terms where the parties are in fundamental disagreement on the proper construction to be accorded to such term. In each case, however, the dispute arises out of an attempt by BSC to import a limitation into the claim language that simply does not exist. Indeed, this appears to be the defining principle of BSC's approach to claim construction, as will be shown below.

II.

BACKGROUND OF DR. JANG'S INVENTIONS

A. Coronary Artery Disease

Coronary artery disease is the most common form of heart disease and the leading cause of illness and death in the United States. It is caused by atherosclerosis, a slow, progressive condition that results in the buildup of plaque (fat, cholesterol, calcium and other substances) on the inside walls of the arteries supplying blood to the heart, causing those vessels to harden and narrow. Coronary artery disease can cause multiple physical ailments, including angina (chest pain), arrhythmia (abnormal heart rhythm), blood clots, myocardial infarction (heart attack), stroke, and heart failure.

B. Balloon Angioplasty

For many decades, the leading treatment for coronary artery disease was coronary bypass surgery, a highly invasive surgical procedure that re-routes blood around the damaged coronary arteries using grafts from healthy vessels. In the late

1970's, interventional cardiologists began performing a revolutionary, minimally invasive procedure known as a percutaneous transluminal coronary angioplasty (PTCA or angioplasty) to open stenosed, or blocked, coronary arteries. *See, e.g., Cordis Corp. v. Medtronic AVE, Inc.*, 339 F.3d 1352, 1354 (Fed. Cir. 2003). First developed by a young German physician named Andreas Gruentzig, and initially met with extreme skepticism by the medical community, more than two million balloon angioplasties are now performed worldwide each year.

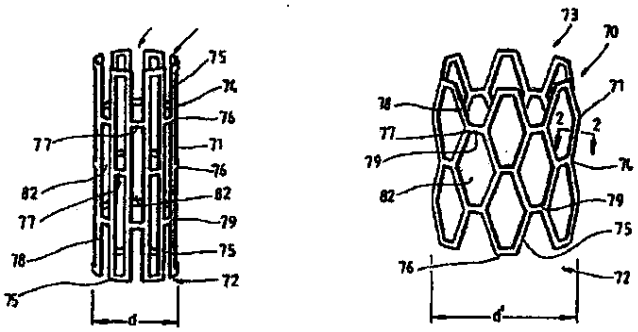
Using a thin tube known as a catheter, a balloon angioplasty is performed by inserting a tiny, deflated, sausage-shaped balloon into the patient's femoral artery. The balloon is then carefully navigated from the entry site in the patient's leg to the site of the blockage in the coronary vessels of the heart. Next, the physician inflates the balloon, compressing the plaque against the arterial wall, before deflating and removing the balloon, thereby restoring proper blood flow through the vessel. *Id.*

Although balloon angioplasty was and remains a significant advance over existing treatments for coronary artery disease, it is not without shortcomings. In some cases, the treated vessel—weakened by the angioplasty procedure—will flop closed after the balloon is deflated and removed, requiring emergency bypass surgery. *Id.* at 1354-55. In other cases, the artery will again become blocked with plaque, a condition known as "restenosis," which frequently requires either a repeat angioplasty or bypass surgery.

C. Balloon-Expandable Coronary Stents

In an effort to improve upon balloon angioplasty, the medical community experimented with numerous medical devices and procedures, including devices that scraped, lasered, vacuumed, drilled, ironed, or shaved the inside of the diseased vessels. All of these technologies failed. In the late 1980's, however, the treatment of stenosed coronary arteries was revolutionized yet again, this time with the development of the balloon-expandable stent by San Antonio physician Dr. Julio Palmaz.

A stent is an expandable, mesh-like tube made of metal. When it is placed inside a coronary vessel, it acts as scaffolding for the arterial walls, propping the vessel open and helping to ensure blood flow to the heart muscle. The pioneering Palmaz coronary stent is illustrated below.



[Unexpanded] [Expanded][2]

The FDA approved the coronary stent illustrated above in 1994. Since that time, the medical community has invested enormous resources in an effort to improve upon Palmaz's revolutionary idea of a balloon-expandable coronary stent.

To implant a coronary stent, a balloon angioplasty is usually performed as an initial step to open the blocked vessel. The interventional cardiologist then inserts an unexpanded stent, mounted on a deflated balloon, through a catheter in the patient's femoral artery, and navigates this device through the arterial system to the blockage site in the coronary vessel. *Cordis Corp.*, 339 F.3d at 1355. The physician then inflates the balloon, which in turn expands the stent. The balloon is then deflated and removed, with the expanded stent left behind to support the arterial walls. *Id.*

Relatively recent advances in stent design also permit a bare-metal stent to be coated with drugs such as sirolimus or paclitaxel, which help control the recurrence of blockages in the treated coronary vessel. These coated devices are known as drug-eluting stents.

---

2 U.S. Patent No. 4,739,762, Expandable Intraluminal Graft, And Method And Apparatus For Implanting An Expandable Intraluminal Graft, Figures 1A and 1B.

III.

OVERVIEW OF DR. JANG'S '021 AND '743 PATENTS

A. Background

On July 13, 1999, the Patent & Trademark Office issued United States Patent No. 5,922,021, entitled "Intravascular Stent" (the "'021 patent"), to Dr. Jang as the sole inventor. *See generally* Ex. 1.[3] On September 21, 1999, the Patent & Trademark Office issued a second patent, United States Patent No. 5,954,743, entitled "Intravascular Stent" (the "'743 patent"), to Dr. Jang, again as the sole inventor. *See generally* Ex. 2.

As noted above, the specifications of these two patents (with the exception of some drawings and related text in the '021 patent that are not in the '743 patent) are virtually identical, and there are numerous overlapping claim terms between these two patents. In order to streamline and simplify the presentation of these issues to the Court, Dr. Jang's discussion of the preferred embodiments of his inventions will focus on examples and illustrations drawn from the broader disclosure of the '021 patent.

B. The Preferred Embodiments of the '021 Patent

The '021 patent discloses numerous potential embodiments, each with different geometric configurations, one of which is set forth below for purposes of discussion. These embodiments are merely examples of the invention and do not delineate the entire scope of the invention. *Varco, L.P. v. Pason Sys. USA Corp.*, 436 F.3d 1368, 1375 (Fed. Cir. 2006) ("References to a preferred embodiment, such as those often present in a specification, are not claim limitations.").

---

[3] All Exhibits referenced herein are attached to the Declaration of June T. Tai in Support of Dr. Jang's Opening Claim Construction Brief. Citations to the specification of the '021 patent follow the convention column:line number(s). Thus, the citation "5:1-8" refers to column 5, lines 1-8. All patent citations herein pertain to the '021 patent unless expressly indicated otherwise.

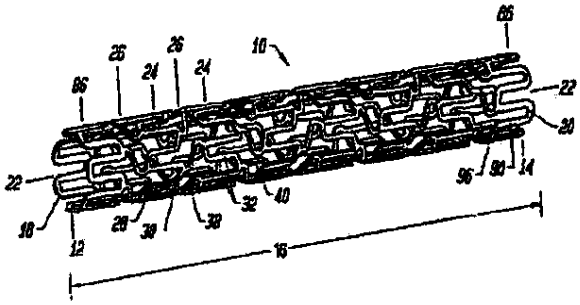


Figure 8E

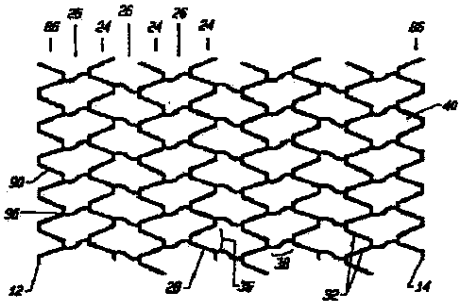


Figure 8F

Figure 8E above is a perspective drawing of an unexpanded stent, whereas Figure 8F is a two-dimensional schematic illustrating the geometry of the same stent, cut-open, flattened, and in its post-expansion mode. The "proximal" end **12**[4] of the stent is to the left in both drawings, while the "distal" end **14** is to the right. *E.g.*, 5:39-40.

Figure 8G, set forth below, is a schematic of the basic building block of the unexpanded stent shown above in Figure 8E, consisting of two expansion strut pairs coupled by a connecting strut:

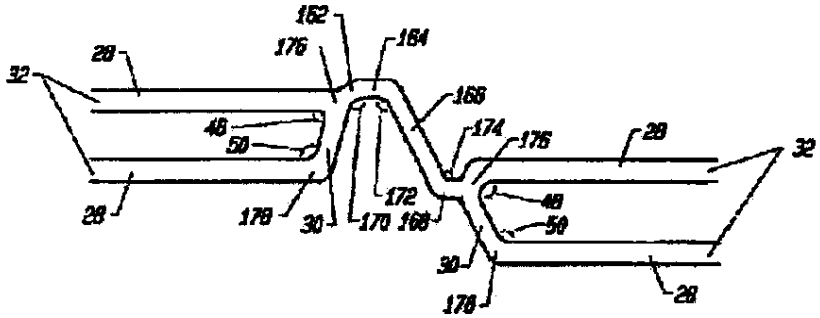


Figure 8G

Specifically, Figure 8G above depicts a pair of parallel expansion struts **28** on the left side of the drawing, and a pair of parallel expansion struts **28** on the right. A

---

4 Following the standard convention of U.S. patents, bolded numerals in text refer to the corresponding, numbered elements in the accompanying patent figures.

vertically oriented joining strut **30** connects the two horizontally oriented expansion struts **28** forming a single pair, and a connecting strut couples the distal (right) end of the pair on the left, with the proximal (left) end of the pair on the right. *See* Fig. 8G. Each expansion strut pair has an open end and a closed end, the latter being formed by the vertical joining strut **30**. In the particular embodiment of the '021 patent disclosed in Figure 8G, above, the connecting strut has four sections; a proximal end section **162**, a distal end section **168**, and first and second intermediate sections **164** and **166**, respectively. 11:62-66.

The '021 patent discloses that when the stent of the preferred embodiment is in its unexpanded state, the expansion struts **28** extend at least in part in the direction of the longitudinal axis of the stent. *See generally* Figs. 1A-8E, 8G-10F; *see also* 5:53-56. In Figure 8E, above, the longitudinal axis of the stent runs through the center of the stent, parallel to element **16**. 5:53-55. When the stent is expanded, the expansion struts **28** are reoriented so that they extend in a more circumferential direction, thereby permitting the stent to expand in diameter. 5:56-61.

The '021 patent discloses that a circumferential series of expansion strut pairs and joining struts form "expansion columns." These columns are depicted as element **24** in the perspective drawing of Figure 1A:

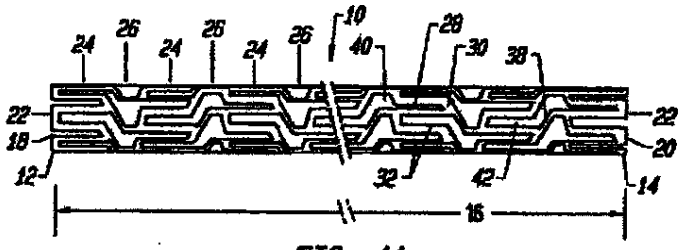


FIG. 1A

As can be seen above, and in Figure 5, below, pairs of adjacent expansion struts within a column are joined alternately at their proximal and distal ends. 6:2-6. As the drawings above make clear, particularly Figure 8G, each connecting strut connects the *distal* end of one expansion strut pair to the *proximal* end of another expansion strut

pair. Moreover, connected expansion strut pairs do not share a common longitudinal axis; rather, they are circumferentially offset. *See, e.g.*, Figure 8G.

The '021 patent teaches that the geometry of the expansion struts and their associated columns can vary widely. For example, the expansion columns of the preferred embodiment are described as "preferably continuous, unbroken ring structures extending around the circumference of the stent," 6:7-12, but the columns may also be discontinuous structures. *Id.* Furthermore, the '021 patent discloses that the spacing between expansion struts within a column can be either uniform or varied, 7:9-17, and may vary from column to column. 7:15-17. Moreover, the width of the space between the two expansion struts of a single expansion strut pair (the "loop slot") may be variable or uniform, 7:18-19, and the longitudinal axis of the loop slots need not be parallel. 7:20-26. Additionally, the '021 patent teaches that the shape of the loop slot can be uniform or varied, 7:27-29, and can be altered by changing the orientation or physical characteristics of the expansion and joining struts. 7:29-34.

As can be seen in the excerpt below from Figure 5, the stent of one embodiment of the '021 patent is formed of two or more expansion columns **24** connected by interspersed connecting strut columns **26**. 5:47-49.

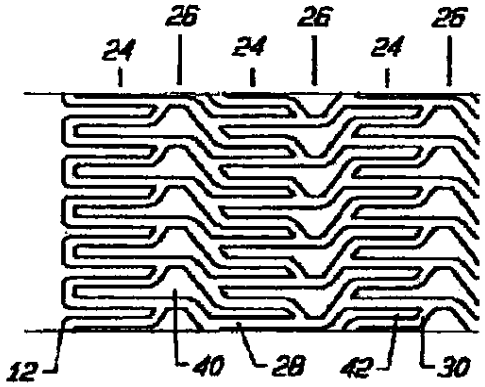


Figure 5

The '021 patent further teaches that—like the expansion strut pairs and columns—the specific geometry of the connecting struts and their associated columns may also vary widely. For example, the '021 patent discloses connecting struts with two linear sections, *e.g.*, Figs. 2A and 2B; three linear sections, *e.g.*, Fig. 9E; and four

linear sections, *e.g.*, Fig. 8G and 10F. The '021 patent further teaches that the connecting strut may be curvilinear (formed of curves) rather than rectilinear (formed of straight lines), and may have one or more radii of curvature (curves), *e.g.*, 13:38-48.

Thus, the connector disclosed in Figure 10A, below, describes a simple arc, while Figure 9D depicts a connector that is sinusoidal (s-shaped).

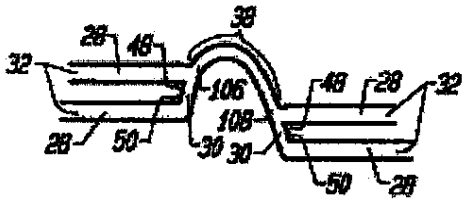


Figure 10A

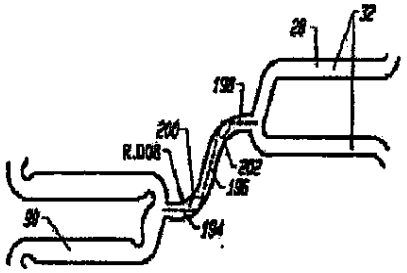


Figure 9D [excerpt]

C. The Relevant Prosecution Histories

It does not appear that the prosecution histories of either the '021 or '743 patents will be the focus of any significant attention with respect to claim construction issues, but in an excess of caution a brief description is set forth below.

1. The '021 Patent

The '021 patent claims priority to the filing of a provisional application on April 26, 1996. *See* Ex. 1 at 1. In a first office action dated January 27, 1998, the Examiner rejected all pending claims, principally under Section 102 and 103 of the Patent Act, but indicated that numerous dependent claims would be allowable if rewritten in independent form. *See* Ex. 3 ("Office Action" dated Jan. 27, 1998).

Following an interview with the Examiner, the applicant amended his claims on June 22, 1998, adding the limitation to claim 1 that "the first expansion strut in the first expansion strut pair in the first expansion column has a longitudinal axis offset from the first expansion strut in the second expansion strut pair in the second expansion column," among other changes. *See id.* ("Amendment" dated June 22, 1998).

On September 15, 1998, the Examiner withdrew all previous objections, but provisionally rejected all pending claims, this time on the ground of non-statutory

double patenting, in view of a co-pending application by Dr. Jang presenting related claims. *See id.* ("Office Action Summary" dated Sept. 15, 1998). The Examiner indicated that the provisional rejection could be overcome if the applicant were to file a terminal disclaimer. *See id.* On October 18, 1998, the applicant filed the required terminal disclaimer, and following a February 10, 1999 Notice of Allowability, the '021 patent issued to Dr. Jang on July 13, 1999. *See id.*

2. The '743 Patent

Like the '021 patent, the '743 patent also claims priority to the filing of a provisional application on April 26, 1996. *See* Ex. 2 at 1. The application that matured into the '743 patent was filed on March 26, 1997. *See id.* After submission of a Preliminary Amendment, which served primarily to correct typographical errors in the specification and patent claims, the Examiner issued a Notice of Allowability on January 5, 1998. *See* Ex. 4 ("Notice of Allowability" dated January 5, 1998). The '743 patent issued to Dr. Jang on September 21, 1999. *See* Ex. 2 at 1.

IV.

BOSTON SCIENTIFIC'S EXPRESS STENT

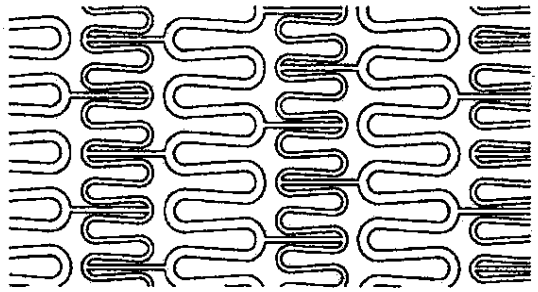
In two recent decisions, the Federal Circuit has made clear that, although the claims of a patent are to be construed independently of the accused device, "knowledge of [the accused] product or process provides meaningful context for the first step of the infringement analysis, claim construction." *Wilson Sporting Goods Co. v. Hillerich & Bradsby Co.*, 442 F.3d 1322, 1326-27 (Fed. Cir. 2006); *see also Lava Trading, Inc. v. Sonic Trading Management LLC, et al.*, No. 05-1177, 05-1192, 2006 WL 1008842, at *1 (Fed. Cir. April 19, 2006) ("[W]ithout knowledge of the accused products, this court cannot assess the accuracy of the infringement judgment under review and lacks a proper context for an accurate claim construction.").

///

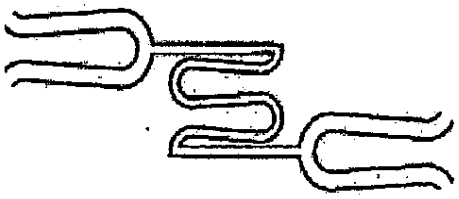
///

///

Here, although discovery in this action has only recently begun in earnest, Dr. Jang currently believes that the following schematic is an approximation of the basic two-dimensional geometry of the accused family of Boston Scientific stents:



The building block of Boston Scientific's Express family of stents, illustrated in the excerpt immediately below, relies upon the unique architecture disclosed and claimed in the '021 and '743 patents:



The expansion strut pair to the far left in the figure above is coupled at its distal end to the proximal end of the expansion strut pair on the right by a three-section connecting strut, consisting of two straight bar sections and an intermediate sinusoidal (s-shaped) section. As the following comparison demonstrates, this is the core of the innovation disclosed and claimed by Dr. Jang in the '021 and '743 patents:

Express Stent

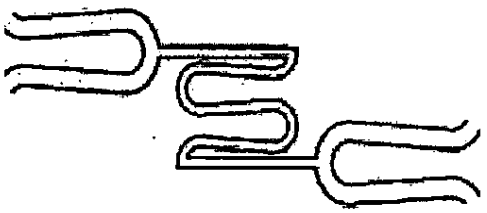
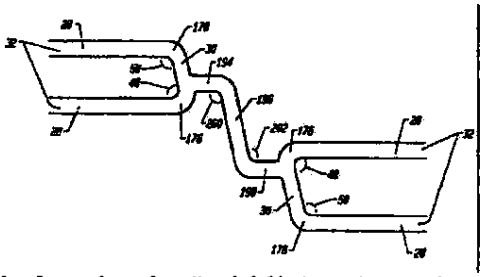


Figure 9E, '021 Patent



BSC disputes this interpretation, claiming that its "middle" column is merely another expansion column, coupled to its neighboring expansion columns by straight-

bar connectors. In an effort to advance this litigation position, BSC is urging that this Court adopt claim constructions that would impose limitations not found anywhere in the claim language itself. This is most apparent in BSC's insistence that: a) connecting struts must connect only "adjacent" expansion columns; b) connecting struts are "unattached to each other;" and, c) connecting strut columns may contain "only" connecting struts and no other structural elements. None of these limitations can be found anywhere in the language of any of the claims at issue.

V.

GENERALLY APPLICABLE CLAIM CONSTRUCTION PRINCIPLES

The Federal Circuit's *en banc* decision in *Phillips v. AWH Corporation* is the most current and authoritative guidance concerning claim construction. *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005). In *Phillips*, the Federal Circuit reconfirmed that the claims, specification, and prosecution history are the principal sources for claim construction. *Id.* at 1311-26. *See also Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979-80 (Fed. Cir. 1995) (*en banc*), *aff'd* 517 U.S. 370 (1996).

Phillips confirmed the "bedrock principle" that "the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Id.* at 1312 (citation omitted). The words of the claim are generally given the meaning that the term would have to a "person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id.* at 1312-13.

The claims do not stand alone, however; they are part of a "fully integrated written instrument," and "must be read in view of the specification, of which they are a part." *Id.* at 1315. The *Phillips* court reiterated the holding in *Vitronics* that "the specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." *Id.*, *citing Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). The

Federal Circuit further acknowledged that the specification "'acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication.'" *Id.* at 1321.

While the claims of the patent must be read in light of the patent specification, the Federal Circuit routinely reverses claim constructions violating the cardinal principle of claim interpretation that limitations may not be imported from the specification into the claims. *See, e.g., Varco, L.P. v. Pason Sys. USA Corp.*, 436 F.3d 1368, 1375-76 (Fed. Cir. 2006) (overturning district court claim construction limiting the claim element that performed the step of "relaying said selected signal or signals to a drill string controller" to pneumatically operated valves); *Gillette Co. v. Energizer Holdings, Inc.*, 405 F.3d 1367, 1374 (Fed. Cir. 2005) (vacating district court's denial of preliminary injunction where the court construed a patent for a disposable safety razor with a group of "first, second, and third" blades as limited to a razor with three blades).

The Federal Circuit has also repeatedly warned against limiting claim terms to the specific embodiments described in the specification. *Phillips*, 415 F.3d at 1323 ("[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments."); *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1117 (Fed. Cir. 2004) ("[P]articular embodiments appearing in the written description will not be used to limit claim language that has broader effect.").

Dictionary definitions are appropriate "in understanding the commonly understood meaning of words," *Phillips*, 415 F.3d at 1322, as long as the dictionary definitions do not "contradict any definition found in or ascertained by a reading of the patent documents." *Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1305 (Fed. Cir. 2005) (internal citations omitted).

///

///

///

VI.

DISCUSSION

A. The Claims At Issue

At issue in this proceeding are certain terms that are common to both claim 1 of the '021 patent and claim 1 of the '743 patent. The parties agree that common terms should have identical meaning, and for the convenience of the Court the claim construction issue for each of these common terms is discussed solely in the context of claim 1 of the '021 patent.

Claim 1 is an independent claim, and is set forth in full below for the Court's convenience.

Claim 1 of the '021 patent states:

"A stent in a non-expanded state, comprising:

a first expansion strut pair including a first expansion strut positioned adjacent to a second expansion strut and a joining strut of the first expansion strut pair that couples the first and second expansion struts at a distal end of the first expansion strut pair, a plurality of the first expansion strut pair forming a first expansion column;

a second expansion strut pair including a first expansion strut positioned adjacent to a second expansion strut and a joining strut of the second expansion strut pair that couples the first and second expansion struts of the second expansion strut pair at a proximal end of the second expansion strut pair, a plurality of the second expansion strut pair forming a second expansion column;

a first connecting strut including a first connecting strut proximal section, a first connecting strut distal section and a first connecting strut intermediate section,

the first connecting strut proximal section being coupled to the distal end of the first expansion strut pair in the first expansion column and

the first connecting strut distal section being coupled to the proximal end of the second expansion strut pair of the second expansion column,

a plurality of the first connecting strut forming a first connecting strut column that couples the first expansion column to the second expansion column,

the first connecting strut intermediate section being non-parallel to the first connecting strut proximal and distal sections,

> wherein the first expansion strut of the first expansion strut pair in the first expansion column has a longitudinal axis offset from a longitudinal axis of the first expansion strut of the second expansion strut pair in the second expansion column."

18:9-41.

B. Claim Terms To Be Construed

Dr. Jang requests that the following terms of the '021 and '743 patents be construed in the manner suggested below. With the exception of the transitional phrase "comprising," Dr. Jang is requesting that each of the claim terms be given its ordinary and plain meaning.

1. "*comprising*"

The term "comprising" is a term of art and as such has a very specific definition. *Genentech, Inc. v. Chiron Corp.*, 112 F.3d 495, 501 (Fed. Cir. 1997) ("'Comprising' is a term of art used in claim language which means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim."); *see also Moleculon Research Corp. v. CBS, Inc.*, 793 F.2d 1261, 1271 (Fed. Cir. 1986); *Georgia-Pacific Corp. v. United States Gypsum Co.*, 195 F.3d 1322, 1327-28 (Fed. Cir. 1999); *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 327 F.3d 1364, 1368 (Fed. Cir. 2003).

There can be no dispute about the meaning of this phrase, and because the term can easily be confused by lay jurors with a term such as "consisting," which has the *opposite* meaning, *see generally* Manual of Patent Examining Procedures ("MPEP") § 2111.03, Ex. 5, Dr. Jang proposes that the jury be instructed as follows:

"The term '*comprising*' means that the named elements are essential, but additional elements may be added and still form a device within the scope of the claim. For example, in a claim that describes an invention 'comprising' elements A, B and C, each of those three elements must be present, but element D may also be present."

///

///

2. "*expansion strut*"

It is clear from the '021 patent that the expansion struts undergo plastic[5] deformation during the expansion process, such that the diameter of the stent gradually and permanently expands. The basic mechanism by which this expansion occurs is clear, and is depicted with clarity, as to one embodiment of Dr. Jang's invention, in Figures 3A and 3B. Expansion struts **32** appear to be parallel to each other in the schematic of the unexpanded stent, Figure 3A. Upon expansion, depicted in Figure 3B, the expansion struts **32** are reoriented so that they extend in a more circumferential direction. *See generally* 8:10-33.

The specification variously notes that the expansion struts of the preferred embodiments may be "substantially parallel" to the longitudinal axis, 5:62-65, and that they "extend at least in part in the direction of the longitudinal axis." 5:53-55. It is clear that for the expansion struts to carry out their function, they must be oriented in at least a partly longitudinal manner.

Accordingly, and consistent with the claim language and specification of the patent, Dr. Jang proposes that the phrase "*expansion strut*" be construed to mean "a strut that extends at least in part in the direction of the longitudinal axis of the unexpanded stent."

BSC's proposal that "expansion strut" be defined by the Court to mean "a strut in an expansion column" is neither helpful nor accurate. First, BSC's definition wrongly assumes that an expansion strut cannot exist separate and apart from an "expansion column," when in fact such columns are by definition formed from multiple expansion struts. BSC's position is thus like saying a brick cannot exist separate and apart from a brick wall. Second, an "expansion column" expressly includes both joining struts and expansion struts. 5:52-53.

---

5 "Plastic" in this context refers to permanent deformation, and is the opposite of "elastic" deformation, which would permit the stent to return to its unexpanded state once the stress causing the deformation of the material is removed.

Finally, BSC's proposed definition is logically circular. According to BSC, an "expansion strut" is a strut found in an expansion column; an "expansion column" is formed by a plurality of "expansion strut pairs;" and an "expansion strut pair" consists of a pair of expansion struts. This is an infinite loop that BSC is proposing, and one that will be infinitely confusing to the jury as well as inaccurate.

3. "*expansion strut pair*"

The plain meaning of "expansion strut pair" is apparent in the language of claim 1: "...a first expansion strut pair including a first expansion strut positioned adjacent to a second expansion strut and a joining strut...that couples the first and second expansion struts." The only difference in the claim language between the first and second expansion strut pairs is the end at which the joining strut couples them; in the first expansion strut pair, it is the distal end, and in the second expansion strut pair, it is the proximal end. Dr. Jang accordingly proposes that the phrase "expansion strut pair" be construed to mean "a pair of adjacent expansion struts, coupled at one end by a joining strut."

BSC's proposed definition of "expansion strut pair" incorporates its definition of "expansion strut," which for all of the many reasons discussed above is inaccurate, circular and mind-numbingly confusing.

4. "*column*"

Claim 1 of the '021 patent recites two different columns, an expansion column and a connecting strut column. These "columns" are depicted in the specification as a vertical extension of space ringing the stent. *E.g.*, Fig. 2A element **24** (expansion column), and Fig. 2A element **26** (connecting strut column); *see also* 5:47-49 ("Stent **10** is constructed of two to fifty or more expansion *columns or rings* **24** connected together by interspersed connecting strut columns **26**.") (emphasis supplied).

Jurors may be familiar with the use of the term "column" in connection with a two-dimensional object, such as a spreadsheet, but few if any will be familiar with the

use of this term in connection with a three-dimensional object. Dr. Jang therefore believes the Court should construe this claim term.

Accordingly, Dr. Jang proposes that the Court construe the term "column" to mean "a vertical extension of space around the circumference of the stent."

5. "*expansion column*"

Claim 1 expressly recites that a plurality of expansion strut pairs form an expansion column. *E.g.*, 18:14-15 ("a plurality of the first expansion strut pair forming a first expansion column…").

Accordingly, Dr. Jang proposes that the Court construe the term "expansion column" to mean "a vertical extension of space around the circumference of the stent formed by two or more expansion strut pairs."

BSC urges the Court to construe this term to mean "a tubular structure formed solely by a plurality of expansion strut pairs arranged in a column...." This definition seeks to import into the definition of "column" a limitation ("solely") that is not present anywhere in the claim language, and that is flatly inconsistent with the explicit definition of "expansion column" recited in the actual claim language.

Claim 1 explicitly defines the "expansion column" as being "formed by a plurality of expansion strut pairs." Claim 1 very clearly does *not* say "formed *solely* by a plurality of expansion strut pairs," as BSC would have this Court re-write the claim. While that limitation might be convenient for BSC's litigation position, it is not the definition of "expansion column" that is found in the express language of the claim, and BSC's proposal should be rejected accordingly.

Moreover, nowhere in the '021 patent are the expansion columns even described, let alone defined, as "tubular structures." BSC's proposed construction is therefore inaccurate and insupportable for this additional reason.

///

///

6. "*proximal*" and "*distal*"

In discussing the geometry of the '021 and '743 patent stents, Dr. Jang consistently uses the phrase "proximal" to refer to the left and "distal" to refer to the right, when viewing the stent from a horizontal perspective. Thus, in Figure 1A below, "[a] proximal end **12** and a distal end **14** define a longitudinal length **16** of stent **10**." 5:40-41.

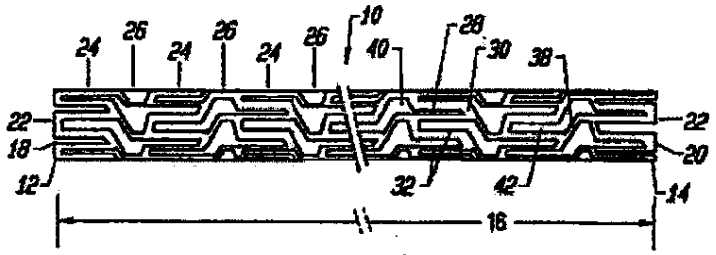


FIG. 1A

The identical convention is also used in both patents with respect to certain components of the stent, such as proximal/distal ends of expansion strut pairs, and the proximal/distal sections of connecting struts. *E.g.*, 3:55-59; 5:49-53.

Accordingly, Dr. Jang proposes that the term "*proximal*" be construed to mean "to the left when viewing the stent from a horizontal perspective," and that "*distal*" mean "to the right when viewing the stent from a horizontal perspective."

BSC proposes to define "distal" and "proximal" from the perspective of an "operator once the stent has been mounted on a catheter." This proposal is not consistent with the language of Dr. Jang's patents. Nowhere in the '021 or '743 patents are "distal" and "proximal" defined with respect to a *person*, or with respect to a stent *mounted on a catheter*.

7. "*connecting strut*"

Claim 1 indicates that there is "a connecting strut," the plain meaning of which is a strut that "connects," *i.e.*, couples or joins. The claim language expressly indicates *what* this strut connects: the distal end of an expansion strut pair in the first expansion strut column, to the proximal end of an expansion strut pair in a second expansion strut

column. Based on this clear claim language, Dr. Jang proposes that a "connecting strut" should be defined as "a strut that couples an expansion strut pair in one expansion column with an expansion strut pair in another expansion column."

BSC claims that a connecting strut must connect *adjacent* expansion columns, despite the fact that no such limitation can be found anywhere in claim 1 of the '021 or '743 patent. Thus, BSC would have this Court define a "connecting strut" by the *proximity* of the two elements that it connects.

In making this argument, BSC relies solely upon the description in the specification of the *preferred embodiment* of Dr. Jang's invention, which states that "connecting struts **38** connect adjacent expansion columns **24** forming a series of interspersed connecting strut columns **26**...." 6:13-14. This description is *explicitly* in reference to "[a] first embodiment of the present invention," as depicted in certain specified figures of the patent. 5:37-38. Far from establishing an unorthodox definition of "connecting strut" for purposes of the '021 patent, this reference expressly points the reader to *numbered elements of the patent figures depicting a preferred embodiment of Dr. Jang's invention*, and thus could not be more clear that it is not a special definition of "connecting strut," but rather an accurate description of one embodiment of Dr. Jang's invention.[6] The Federal Circuit repeatedly strikes down efforts to improperly limit claims in the manner that BSC suggests. *Phillips*, 415 F.3d at 1323 ("[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments").

---

[6] Similar language appears in other portions of the description of specific embodiments, and also makes abundantly clear that the reference is to a specific design or embodiment of the invention. *E.g.*, 15:22-24 ("*In the design of [Figure] 10C* connecting strut 38 joins two circumferentially offset expansion strut pairs 32 in adjacent expansion columns") (italics supplied); 16:4-6 ("*In the design of [Figure] 10F* connecting strut 38 joins two circumferentially offset expansion strut pairs 32 in adjacent expansion columns") (italics supplied).

Here, nothing in the language of claim 1 suggests that a "connecting strut" requires that the first and second expansion columns must be *adjacent* to each other. With respect to the expansion columns themselves, claim 1 requires no more than "a first expansion column" and "a second expansion column," and does not impose *any* restriction on where those columns are located relative to each other. Indeed, the very fact that the *specification* explicitly refers to the adjacency of the expansion columns in describing specific embodiments of Dr. Jang's invention, but the *claim language* does not do so, clearly indicates that the claim language is *broader* than the specific examples of Dr. Jang's invention set forth in the specification. *Innova/Pure Water*, 381 F.3d at 1117 ("[P]articular embodiments appearing in the written description will not be used to limit claim language that has broader effect.").

Nor would it have made any sense for the patentee (or Patent Office) to impose such a limitation by distorting the plain meaning of "connecting strut." Whether a strut connects adjacent or non-adjacent expansion strut pairs, it is still a strut that connects two expansion strut pairs. Nothing about the *function* of the connecting strut itself requires that the elements it connects must be adjacent, as long as it is in fact connecting the required elements. Indeed, had the patentee (or the Patent Office) intended to impose a requirement that the expansion columns be *adjacent*, claim 1 would have expressly recited that the first and second expansion columns are adjacent, rather than crafting an idiosyncratic definition of "connecting struts."[7]

This is particularly clear when the Court looks to the *context* of the claim language, as it must. *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003) ("[T]he context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of those terms.").

---

[7] A simple example that comes to mind is that of a bridge. If one wanted to specify that a patent claim directed to a bridge connecting two land masses requires strict adjacency of the land masses—*e.g.*, precluding any islands in the middle of the body of water crossed by the bridge—one would say so expressly, not by creating a tortured definition of the word "bridge."

Here, claim 1 *expressly* recites "a first expansion strut pair including a first expansion strut positioned *adjacent* to a second expansion strut..." and "a second expansion strut pair including a first expansion strut positioned *adjacent* to a second expansion strut...." 18:11-13; 18:16-18.

Thus, claim 1 *expressly sets forth a requirement of adjacency* for certain expansion *struts*, but affirmatively does *not* do so with respect to the relationship of the expansion strut *columns*. The context of claim 1 therefore makes clear that when the claim requires adjacency, it explicitly says so. *See Mars Inc. v. H.J. Heinz Co.*, 377 F.3d 1369, 1377 (Fed. Cir. 2004) (where the modifier "at least" appeared before a first claim term but not a second, it could not be fairly read to apply also to the second claim term). BSC's proposed construction would therefore not only add a limitation that does not appear anywhere in the claim language, but that is flatly inconsistent with the *context* and clear import of the claim language.

Here, the specification of the '021 patent describes in detail at least six different embodiments of Dr. Jang's invention, and multiple variations on those six embodiments. *E.g.*, 14:48-49 ("[a] third variation of a sixth embodiment of the present invention..."). As the Federal Circuit has recently noted, "[t]o avoid importing limitations from the specification into the claims, it is important to keep in mind that the purposes of the specification are to teach and enable those of skill in the art to make and use the invention and to provide a best mode for doing so." *Phillips*, 415 F.3d at 1323 (*en banc*).

Thus, BSC's effort to re-write claim 1 so that it requires a feature of the patent's preferred embodiment is a classic example of a litigation-driven claim construction that seeks to import a limitation into the claims from the specification, and should be rejected accordingly.

///

///

This Court should thus construe "connecting strut" to mean "a strut that couples an expansion strut pair in one expansion column with an expansion strut pair in another expansion column."

8. "*connecting strut column*"

Claim 1 refers to "a plurality of the first connecting strut forming a first connecting strut column." Consistent with this exact claim language, Dr. Jang proposes that "*connecting strut column*" be construed to mean "a vertical extension of space around the circumference of the stent formed by two or more connecting struts."

BSC seeks to import two limitations into the claim term "connecting strut column." First, BSC claims that the column must be "formed *solely* of a plurality of connecting struts." That is not what the claim language says. Claim 1 recites a "plurality of the first connecting strut forming a first connecting strut column." It does not say a "plurality of the first connecting strut, *and no other elements*, forming a first connecting strut column." For this and all of the additional reasons discussed above with respect to BSC's similar argument that an "expansion column" consists "solely" of expansion strut pairs, *see* Section VI.B.5, BSC's proposed construction in this regard should be rejected outright.

Second, BSC's proposed construction shamelessly tries to re-write the claim by contending that the connecting struts in the column must be "unattached to each other." This alleged limitation will not be found *anywhere* in the claim language, nor is there anything inherent in a "column" that would exclude such attachments. The fact that the connecting struts in the preferred embodiments of Dr. Jang's patents are *not* attached to each other simply means that the claim language is broader (as it usually is), and BSC's litigation-driven interpretation should be rejected accordingly. *Innova/Pure Water*, 381 F.3d at 117.

Dr. Jang respectfully requests that the Court construe "connecting strut column" to mean precisely what the language of claim 1 suggests, "a vertical extension of space around the circumference of the stent formed by two or more connecting struts."

9. "*longitudinal axis*"

Dr. Jang believes that a construction of "longitudinal axis" would be helpful to the jury. Webster's Third New International Dictionary defines "longitudinal" as "of or relating to the lengthwise dimension...." Ex. 6 at 1333. Similarly, Webster's defines "axis" as "a straight line about which a body or a 3-dimensional figure rotates or may be supposed to rotate." *Id.* at 153. Putting this in the context of the patent and the claims, it is clear that "longitudinal axis" refers to the axis or imaginary line running lengthwise through the center of an object.

Accordingly, Dr. Jang proposes that the Court construe "longitudinal axis" as "an imaginary line running lengthwise through the center of an object. For example, the longitudinal axis of a stent is an imaginary line running lengthwise through the center of the stent."

10. *"... the first expansion strut of the first expansion strut pair...has a longitudinal axis offset from a longitudinal axis of the first expansion strut of the second expansion strut pair..."*

The parties do not have a fundamental disagreement with respect to the meaning of this claim phrase, but have not been able to settle on a mutually acceptable construction.

As noted above, the plain meaning of a longitudinal axis is an imaginary straight line running lengthwise through the center of an object. *See* Ex. 6 at 1333, 153; *see also* Section VI.B.9, *supra*. Here, the reference is to the longitudinal axis of specified struts, which are "offset" from each other. Likewise, the specification consistently refers to expansion strut pairs that are circumferentially offset. *See, e.g.*, 6:52-54 ("Furthermore, expansion strut pairs **32** of asymmetrical cell space **40** may be circumferentially offset i.e. have longitudinal axes that are not collinear . . . ."). While BSC's proposed definition uses the "circumferentially offset" language, it *omits* the claim term "longitudinal axis." Dr. Jang believes that BSC's construction, therefore, is less accurate.

Accordingly, Dr. Jang proposes that this phrase be construed to mean "the specified expansion struts (the first expansion strut of the first expansion strut pair and the first expansion strut of the second expansion strut pair) have longitudinal axes that are circumferentially offset from one another."

11. "*radius of curvature*"

Dependent claims 6, 7, and 8 of the '021 patent and dependent claims 16 and 17 of the '743 patent include the claim term "radius of curvature." According to Webster's Third New International Dictionary, a "radius of curvature" is a mathematical term with a precise definition: "the reciprocal of the curvature of a curve." Ex. 6 at 1874.

This definition is consistent with the use of the term "radius of curvature" in the patent. For example, in the specification of the '021 patent, the description of one of the preferred embodiments of the invention states, in reference to Figure 9D, that "connecting struts **38** have *wide* radii of curvature at the joints between the connecting strut sections **194**, **196**, and **198** . . . . " 13:41-42 (italics supplied). In describing Figure 9E, however, the specification states, "The connecting strut **38** of FIG. 9E has *smaller* radii of curvature at the joints between proximal end section **194**, intermediate section **196**, and distal end section **198**." 13:50-54 (italics supplied).

Accordingly, Dr. Jang proposes that a "radius of curvature" be construed by the Court to mean "a mathematical measurement of the curvature of a curve; specifically, the reciprocal of the curvature of a curve."

BSC's proposed definition that a "radius of curvature" is limited to a "smooth curve" is contrary to the plain meaning of the term in light of the patent specification as well as the dictionary definition. BSC's proposed construction should therefore be rejected.

///

///

///

VII.

CONCLUSION

Dr. Jang respectfully requests that the Court adopt the constructions proposed above with respect to the specified claim terms of the '021 and '743 patents.

Dated: May 5, 2006

Respectfully submitted,

GIBSON, DUNN & CRUTCHER LLP
Wayne M. Barsky
Michael A. Sitzman
Julian W. Poon
June T. Tai
Brenda L. Kleidosty
Shannon E. Mader

MUNDELL, ODLUM, & HAWS, LLP
Thomas C. Mundell

By: Wayne M. Barsky /bjk
Wayne M. Barsky

Attorneys for Plaintiff,
G. David Jang, M.D.

10941472_1.DOC

PROOF OF SERVICE

I, Sandra Kowalski, declare as follows:

I am employed in the County of Los Angeles, State of California; I am over the age of eighteen years and am not a party to this action; my business address is 333 South Grand Avenue, Los Angeles, California 90071-3197, in said County and State. On May 5, 2006, I served the following document(s):

DR. JANG'S OPENING CLAIM CONSTRUCTION BRIEF

on the parties stated below, by placing a true copy thereof in an envelope addressed as shown below by the following means of service:

HOWREY LLP **Matthew M. Wolf, Admitted *pro hac vice*** **Edward Han, Admitted *pro hac vice*** **John Nilsson, Admitted *pro hac vice*** **Sandra Smith Thayer** **1299 Pennsylvania Avenue, NW** **Washington, DC 20004** **Telephone: (202) 783-0800** **Facsimile: (202) 383-6610** **Wolfm@howrey.com** **Hane@howrey.com** **Nilssonj@howrey.com** **Thayers@howrey.com**	**Attorneys for Defendants,** **Boston Scientific Corporation and** **SciMed Life Systems, Inc.**

☑ **BY MAIL**: I placed a true copy in a sealed envelope addressed as indicated above, on the above-mentioned date. I am familiar with the firm's practice of collection and processing correspondence for mailing. It is deposited with the U.S. Postal Service on that same day in the ordinary course of business. I am aware that on motion of party served, service is presumed invalid if postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.

☑ **BY PDF FORMAT**: I caused each such document to be transmitted by PDF Format, to the parties and e-mail addresses indicated above

☐ **(STATE)** I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

☑ **(FEDERAL)** I declare under penalty of perjury that the foregoing is true and correct.

Executed on May 5, 2006.

Sandra Kowalski